Congress of the United States Washington, DC 20515

November 16, 2022

The Honorable David Scott
Chairman
House Agriculture Committee
1301 Longworth House Office Building

The Honorable Glenn "GT" Thompson Ranking Member House Agriculture Committee 1010 Longworth House Office Building

Dear Chairman Scott and Ranking Member Thompson,

We write to you as members of the Sustainable Energy and Environment Coalition (SEEC) Climate and Agriculture Task Force. The Task Force's mission is to build on the increasing engagement by American farmers on climate change issues and use that as a catalyst to promote climate-friendly agriculture in the upcoming Farm Bill reauthorization.

Estimates show that in 2020, agriculture accounted for approximately 11 percent of greenhouse gas emissions in the United States. Because agriculture also holds the potential to sequester significant quantities of carbon, it represents both a major challenge but also opportunity in our efforts to tackle climate change. Farmers and forest landowners have worked to develop and implement methods to bring down emissions and slow the effects of climate change on their lands. With Farm Bill reauthorizations only taking place every five years, it is critical that the upcoming Farm Bill include policies that support climate-related research, foster climate-smart innovation, and empower producers to utilize practices that mitigate climate change.

The 2018 Farm Bill contained several provisions that have played a role in addressing the U.S. agriculture sector's climate impacts. For example, the 2018 Farm Bill allowed for cover crops to be considered "good farming practices" for crop insurance purposes. Cover crops help capture atmospheric carbon dioxide into soils, help improve soil health, and make harvestable crops more resilient against climate-fueled disasters like floods. The 2018 Farm Bill also included funding to establish the Composting and Food Waste Reduction pilot program, which has helped establish projects to address the greenhouse gas emissions associated with food loss and waste.

We were thrilled to pass the Inflation Reduction Act, which included historic investments targeting climate change via agriculture and forestry. The law provides \$20 billion to programs designed to bolster conservation efforts and \$5 billion for forest management, planning, and restoration. We are closely watching the rollout of these funds and view the 2023 Farm Bill as an opportunity to build upon the climate-smart successes of the Inflation Reduction Act.

We have compiled the enclosed report to outline opportunities within the Farm Bill to further tackle the climate crisis. The report covers a range of policy areas, including soil health, research, food waste, electrification, and more. These recommendations will help equip farmers and foresters with tools they need to respond to the climate crisis.

This report is not intended to be an exhaustive list of all climate-friendly policies and programs that could be or should be considered in the Farm Bill. Rather, it is a list of priorities that our task force members have collectively determined are crucial for inclusion in the final bill. We appreciate your consideration of these recommendation as you begin to craft the 2023 Farm Bill.

Sincerely,

Chellie Pingree Kim S

Task Force Co-Chair

Kim Schrier, M.D. Task Force Co-Chair

Earl Blumenauer Task Force Member Lisa Blunt Rochester Task Force Member Julia Brownley Task Force Member

Chrissy Houlahan Task Force Member

Jared Huffman
Task Force Member

Ann McLane Kuster Task Force Member

Doris Matsui Task Force Member James P. McGovern Task Force Member

Jon's Matsui James P. Me Poven

Jimmy Panetta
Task Force Member

Recommendations for a Climate-Friendly Farm Bill

Soil Health & Carbon Sequestration

Supporting Good Soil Management Practices in United States Department of Agriculture (USDA) Programs

Healthy soils are the foundation of sustainable and productive agriculture. Managing soil health allows for producers to maximize the ecosystem services and economic benefits of their lands by reducing erosion, managing pests, storing carbon, maximizing water infiltration, improving nutrient cycling, and ultimately improving the resiliency of their working lands. Basic principles can be applied to improve soil health, including practices such as minimizing disturbance to the soils, maximizing soil cover, biodiversity, and the presence of living roots. As world population and food production demands rise, keeping our soils healthy and functioning will be of paramount importance to maximizing agricultural productivity, ecosystem service delivery, and climate resilience.

The USDA Natural Resources Conservation Service (NRCS) has several programs that can be targeted to help farmers build soil health, including, but not limited to, the Conservation Reserve Program (CRP), Conservation Stewardship Program (CSP), Environmental Quality Incentives Program (EQIP) and Regional Conservation Partnership Program (RCPP).

- Support and expand existing NRCS programs that target soil health
- Make greenhouse gas (GHG) emission reduction and carbon sequestration a purpose of the Environmental Quality Incentives Program
- Add soil health enhancement and GHG emission reduction to the criteria for ranking proposals for entry into the Conservation Stewardship Program
- Add GHG emission reduction and carbon sequestration to the list of top ten practices that can receive higher EQIP payment rates
- Expand NRCS Conservation Technical Assistance to farmers to improve soil health
- Fund grant programs that support a diverse range of research, education, and outreach activities related to soil health
- Increase funding for the Conservation Innovation Grant On-Farm Conservation Innovation Trials, including the on-farm Soil Health Demonstration Trials
- Provide incentives for winter cover crops
- Provide funding and education to support precision farming
- Authorize new regional agroforestry centers with an emphasis on soil health and climate change. Agroforestry is the integration of trees and shrubs into farming systems to create environmental, economic, and social benefits.
- Create new USDA grants specifically to state and tribal governments to improve soil health on agricultural lands. Such programs can be any combination of

technical assistance, financial assistance, R&D, education and training, and monitoring and evaluation

Relevant Legislation:

- Agriculture Resilience Act (H.R. 2803, Rep. Chellie Pingree)
- Climate Agricultural Conservation Practices Act (H.R. 2757, Rep. Julia Brownley)

Soil Amendments

There are a number of soil amendments, such as biochar and biostimulants, that represent opportunities to strengthen soil health. For example, biochar may provide enhanced soil carbon storage, reduced soil methane and nitrous oxide emissions, increased soil water holding capacity, and improved crop yields. Yet, knowledge surrounding the implementation and impacts of soil amendments remain uncertain and limited. In order to support new markets for agriculture and our farmers, we must fill critical knowledge gaps in the production, adoption, and long-term efficacy of soil amendments.

Recommendations:

- Fund biochar demonstration projects to fill critical knowledge gaps on biochar production and application to soil
- Develop a list of evidence-based recommendations and best practices for biochar feedstocks and production methods for the agriculture, forestry, and energy sectors
- Collaboration between Departments of Energy and Agriculture to develop a plan for action to support development of a biochar and biofuel industry
- Provide clarity regarding the regulation of plant biostimulants

Relevant Legislation:

- Biochar Research Network Act (H.R. 8596, Rep. Marionette Miller-Meeks)
- Plant Biostimulant Act (H.R. 7752, Rep. Jimmy Panetta)

PFAS Remediation

Unfortunately, per- and polyfluoroalkyl substances (PFAS) contamination on farmland is becoming a growing problem in the United States. PFAS chemicals are known to be harmful to human health and increasingly being found in soil, water, animal feed, crops, and livestock. PFAS contamination poses a serious risk for soil health, the health of our environment, and the future of our farms.

Recent studies have shown that mycological organic matter can be applied to facilitate the removal of PFAS though soil washing, phytoremediation, and other processes. There are a number of opportunities to support PFAS remediation, and resources from the USDA are needed.

- Expand existing programs such as the Environmental Quality Incentives Program, Conservation Reserve Program, Emergency Assistance for Livestock, Honey Bees and Farm-Raised Fish Program, and Farm Service Agency loans to support PFAS remediation on farmland
- Develop and implement a science-based conservation standard for PFAS remediation in soils
- Utilize conservation practice standards to allow for PFAS soil testing
- Support research for soil remediation

Relevant Legislation:

• Relief for Farmers Impacted by PFAS Act (H.R. 9186, Rep. Chellie Pingree)

Food Waste

Reducing consumer and farm food waste

Nearly half of the food produced in the U.S. is lost or wasted. This means hundreds of billions of dollars is spent on growing, processing, transporting, storing, and disposing of food that is never consumed. Food is the largest input by weight in our landfills and incinerators. Decomposing food in landfills is a major source of methane emissions, and because of the vast amount of food that goes to landfills, they are currently the third largest source of methane in the U.S.

Back in 2015, USDA and EPA set a goal of reducing the U.S.'s food waste by 50% by 2030. We are currently not on pace to meet that goal without significant new federal support.

- Identify areas of opportunity to address EPA's Food Recovery Hierarchy (e.g. source reduction, feed hungry people, feed animals, industrial uses, composting) in Farm Bill programs and expand authorities in existing programs to incorporate these objectives
- Establish financial assistance and incentives to make waste disposable more affordable for small businesses, as well as financial assistance small- to mid-sized trash disposal companies to access methane digestion technologies
- Provide financial assistance for family farms to dispose of waste in an environmentally sustainable way
- Improve data collection by the Energy Information Administration on how much energy is generated from food waste annually, including data on biodigesters
- Provide support for schools working on food waste reduction projects
- Standardize and simplify food date labels to reduce consumer confusion resulting in food waste

- School Food Recovery Act (H.R. 5459, Rep. Chellie Pingree)
- Food Date Labeling Act (H.R. 6167, Rep. Chellie Pingree)
- Food Donation Improvement Act (H.R. 6251, Rep. Jim McGovern)
- Zero Food Waste Act (H.R. 4444, Rep. Julia Brownley)

Composting

Composting is one of the most environmentally friendly means to dispose food waste and other organic waste. It emits a smaller quantity of greenhouse gases compared to alternative disposal methods, while also yielding a valuable soil additive that enhances soil health. While there is growing interest by individuals and businesses across the country to compost food scraps and for compostable packaging, there is not enough composting infrastructure in the U.S. to meet this demand.

The 2018 Farm Bill authorized the creation of the Community Compost and Food Waste Reduction Project (CCFWR) which assists local and municipal governments with projects to develop and test strategies for planning and implementing local compost and food waste reduction plans.

Recommendations:

- Expand on existing CCFWR program and adopt new strategies to develop composting and anaerobic digestion infrastructure
- Promote national food waste education and awareness through USDA public awareness campaign. This campaign could incorporate elements of behavioral science, highlight methods for preserving and storing foods, provide consumer tips to identify whether food is safe and edible, and educate consumers how to compost food scraps.

Relevant Legislation:

• COMPOST Act (H.R. 4443, Rep. Julia Brownley)

Supporting innovative applications of agricultural waste products

Instead of sending to the landfill agricultural waste and residues, we should pursue solutions to redirect these waste streams to be used in new innovative products.

This coincides with increased demand to replace fossil fuel-based products, such as fuels and plastics, with bio-based alternatives, so long as those alternatives are sufficiently better at reducing greenhouse gas emissions on a lifecycle basis. By way of example, corn and soy-based producers are already utilizing this demand to make "greener" plastic options for consumers.

- Research and support expanded usage of agricultural residues for advanced biofuel or sustainable aviation fuel production. This should be balanced with competing needs to use agricultural byproducts for soil management practices.
- Identify areas in the Farm Bill to expand on growing demand for plant-based plastics to replace petroleum-based plastics.
- Identify research and commercialization opportunities for agricultural waste for the construction industry.

Electrification

On-Farm Clean Energy

Agriculture accounted for about 3 percent of industrial energy consumption in the United States in 2021, representing a major source of GHG emissions but also a potential new revenue stream derived from beneficial electrification. According to the USDA, there are 2.1 million farms with a total electricity demand of approximately 55,000 to 67,000 GWh required to power farm equipment that are currently using fossil fuels. On-farm electrification with renewable energy resources can drive a 44-70% decrease in the industry's carbon footprint, revealing a promising approach to decarbonize the agricultural sector.

On-farm clean energy provides an opportunity to farmers to produce their own energy, save money, improve efficiency and operations through advanced technologies, and combat the effects of climate change. Ranging from biomass, solar, to wind power, clean energy can help heat, light, and fuel farms within the United States. The vast amount of acreage that farmland uses makes them particularly appealing for renewable energy deployment that similarly needs large amounts of land. When intentionally designed, it is possible for renewable energy to coexist alongside crops in a mutually beneficial way. With federal investments, farmers can participate in the shift to renewable energy to make their operations more efficient and cleaner.

- The Rural Energy for America Program (REAP) should be expanded and strengthened to prioritize projects that have the most emissions reduction potential and provide multiple benefits
- Establish the reduction of carbon dioxide and carbon dioxide equivalent emissions as a primary purpose of REAP and add those goals to the selection criteria
- Through the Conservation Technical Assistance program, USDA should proactively educate and provide technical assistance to farmers about benefits of co-location of clean energy generation on farmland
- The Agricultural Energy Management Plan completed by USDA-certified service providers should consider the potential benefits of co-location of clean energy generation on farmland and provide technical assistance on how such assets could

- benefit farmers and what agricultural regimes would work best with different clean energy systems
- USDA should provide additional incentives for Rural Electric Co-ops to work with farmers to co-locate rural clean energy generation
- Support efforts to reduce toxic air emissions around rural agricultural sites

- REAP Improvement Act (H.R. 4162, Rep. Abigail Spanberger)
- Agriculture Resilience Act (H.R. 2803, Rep. Chellie Pingree)

Electric Farm Equipment Alternatives

Electric farm equipment alternatives can represent a large step in the clean energy transition for the U.S. agricultural sector. Farms often rely on tractors and other machinery reliant on fossil fuels, resulting in potential exposure to fossil-fuel price fluctuations and particulate pollution for farmworkers. Alternative electric farm equipment can help make equipment and farms more sustainable and reach the critical goal of net-zero carbon emissions within this sector.

Electrification of farm equipment will aid the technological advancements currently being explored (e.g. real-time crop monitoring by drones, autonomous tractors, etc.), that are better suited to interface with systems optimized to run on the electrical grid. Electrification allows farmers to diversify their energy sources, pursue more advanced equipment, and increase productivity, ultimately reducing their carbon emissions and streamlining their operations for greater efficiency.

Recommendations:

- Identify existing programs or new programs that need to be created to expand access for farmers to purchase electric tractors or other types of electrified farming equipment
- Include financial assistance through grants or other subsidies available to provide assistance for farmers with priority to small, medium and disadvantaged farmers

Relevant Legislation:

• Electric Vehicle Charging Infrastructure for Farmers Act (H.R. 6390, Rep. Abigail Spanberger)

Expanding Electrification Infrastructure

A major hurdle to widespread adoption of electric and autonomous agricultural machinery is the lack of electrification infrastructure (e.g. charging infrastructure, wi-fi connectivity) in rural settings. Charging stations on farms are required to provide energy to machinery that must work efficiently to maximize yields. Further, autonomous navigation and controls typically associated with an updated fleet of machinery require good communications with base stations or the internet. To achieve emissions reductions on a large enough scale within the agricultural sector,

the U.S. needs to incentivize both the transition to electric farm equipment as well as the infrastructure to support it.

Recommendations:

 Expand categories of environmentally preferable technologies for what qualifies under electrification incentives, support development and expansion of microgrids.

Climate Resilience

Incentivizing climate risk management

Farmers are increasing facing the brunt of climate impacts, ranging from droughts, wildfires, to extreme flooding. Not only must we reexamine how our farming practices contribute to the climate crisis, we must also ensure our agricultural lands are able to withstand the extreme weather events that are increasing in frequency and intensity. As farmers, ranchers, and forest landowners confront the challenges posed by a changing climate, federal policy should provide support to agricultural producers to build resilience within production systems.

Recommendations:

- Provide support for the development, planting, and marketing of extreme weather resilient crops
- Systematize government response to crop and livestock impacts from extreme weather events

Boosting USDA Conservation Programs

Title 2 Conservation programs, including EQIP, CSP, CRP, are broadly popular and heavily oversubscribed. Nationally, they only fund around 30% of applications across all programs. New investments from the Inflation Reduction Act are much needed, but work needs to be done to ensure new investments in these programs are protected and disbursed quickly and efficiently. These programs provide financial incentives to farmers to build resiliency into their land either by adopting certain adaptive practices or by removing ecologically important lands from production.

- Improve burdensome application process to improve accessibility to farmers and ensure broader access to these programs for socially disadvantaged and veteran farmers, as well as women, young and beginning farmers
- Increase hiring of FSA and NRCS staff on the ground, because currently, local offices don't have enough people on the ground to help farmers execute the necessary contracts
- Explore ways for these programs to support farmers who are already practicing sustainable farming techniques

- Healthy Soils Healthy Climate Act (S.1356, Sen. Ron Wyden)
- Agriculture Resilience Act (H.R.2803, Rep. Chellie Pingree)

Drought Resilience and Mitigation

Climate change has made drought more severe and persistent, with parts of the western United States experiencing their driest conditions in over 1,200 years. This puts the water supplies of millions of Americans at risk and imperils our nation's ecosystems. The impacts of drought and drinking water shortages fall disproportionately on underserved environmental justice communities.

Recommendations:

- Provide near-term drought relief, including preventing key reservoirs of the Colorado River from declining to critically low levels
- Invest in water projects with rapid implementation timelines
- Advance modern water management data and technology
- Protect and restore ecosystems, especially those that provide water supply

Relevant Legislation:

- Wildfire Response and Drought Resiliency Act (H.R. 5118, Rep. Joe Neguse)
- Western Water Recycling and Drought Relief Act (H.R. 3112, Rep. Jerry McNerney)
- Water Infrastructure Finance and Innovation Act Amendments (H.R. 8127, Rep. Kim Schrier)

Research

General Agriculture Research

Agriculture research is key to determining the best practices to adapt our food systems to a changing climate. For example, the ability for researchers to conduct experiments on plants under various environmental stress conditions will be critical for understanding crop responses to new climate conditions. As extreme weather events become more frequent, research will help mitigate crop losses and ensure a healthy agricultural economy. According to the Congressional Research Service, public investment in agricultural research is linked to productivity gains and economic growth. Studies have consistently reported high social rates of return on public agricultural research investments—on the order of 20%-60%.

Agriculture has immense potential to mitigate the impacts of climate change. But there is much to be learned about new and emerging strategies, such as soil amendments, feed additives, and alternative proteins, both in terms of their efficacy and their scalability. A few important research areas are outlined below.

• Support and expand agricultural research, with a specific emphasis on climate change mitigation, resilience, and adaptation

Relevant Legislation:

- Agriculture Resilience Act (H.R.2803, Rep. Chellie Pingree)
- America Grows Act (H.R.2866, Rep. Cheri Bustos)
- AG RESEARCH Act (S.2636, Sen. Mazie Hirono)

Soil Amendments

Soils hold great potential as a carbon sink. When treated with certain additives, both crop and rangeland soils not only store carbon, but provide co-benefits such as increased water quality and crop yield. One example of a soil amendment/additive is through enhanced rock weathering or enhanced weathering. This is a process where silicate rocks are ground into a fine powder and exposed to CO₂, allowing for the capture and sequestration of the atmospheric carbon. The rock dust can be used as a soil additive to absorb carbon produced by plant roots. This is an accelerated version of the natural rock weathering process, or the chemical breakdown of silicate minerals that removes CO₂ from the atmosphere. Continued research on rock dust as a soil amendment is needed to fully understand its potential for carbon sequestration.

Recommendations:

Additional research is needed to/for: field trials of carbon sequestration
across environments (soils, climate, crops, etc.); fate of carbon (leached,
form, saturation); measurement of water infiltration and crop yields;
effects on ecosystems (communities, populations, etc.); unforeseen
consequences (dust pollution, heavy metals, etc.); and greenhouse gas
emissions from transport and breaking down rocks for use

Specialty Crops

Specialty crops are "fruits and vegetables, tree nuts, dried fruits, and horticulture and nursery crops (including floriculture)" (7 U.S.C. §1621 note), and account for roughly one-third of annual U.S. crop sales. These crop systems are unique and require a tailored approach and resources from USDA.

Cutting edge research led by USDA and Land Grant Universities is essential to combat new and emerging threats to specialty crops such as Little Cherry Disease, and develop climate and drought resilient grains, potatoes, fruits, and more.

In addition to their potential conservation uses, researchers are turning to specialty crops like fungi as natural solutions to problems ranging from bee depopulation to helping our astronauts.

- Support and expand the Specialty Crop Research Initiative and the Specialty Crop Block Grant Program
- Support the Emergency Citrus Disease Research and Development Trust Fund
- Support and expand the Organic Agriculture Research and Extension Initiative

Feed Additives

Enteric fermentation, the digestive process by which cows and other ruminants produce methane, represents 28% of domestic methane emissions. Ruminants, such as cattle, buffaloes, sheep, and goats have the highest methane emissions per unit of body mass among all animal types. Feed additives to reduce agricultural methane are an emerging area of research.

One particularly promising feed additive is seaweed. Topics of research needed related to seaweed include examining what types of seaweed reduce methane emissions; whether the ability of seaweed to inhibit methane production is influenced by changes in the animal's diet, digestion, microbiome, or genetics; examining seaweed/kelp as soil amendment; the carbon sequestration benefits and nutrients for soil; and looking at studies in coastal meadows and coastal forests where seaweed naturally deposited.

Recommendations:

 Direct specific USDA funds both through NIFA and ARS to study the potential of various feed additives to reduce domestic methane emissions from enteric fermentation

Alternative Proteins

There is currently a boom in the U.S. food market for alternative proteins produced from plants, from cultivated cells, or via fermentation. Because of the feedstocks and processes that go into producing alternative proteins, they are generally thought to have a lower greenhouse gas emissions profile than livestock protein sources. This is particularly important when considering the global context of continued population growth and the fact that as countries develop, their demand for protein increases. These two factors will drive a growing need for more protein to feed the world in a sustainable way.

The U.S. has the opportunity to capitalize on this growing global demand by investing into the burgeoning alternative proteins market. A key way the federal government can assist in these efforts is by directing its research funding towards finding innovative ways to optimize all stages of the production process, from optimizing ingredient processing to developing new manufacturing methods.

• Direct USDA research arms to support alternative protein research

Mycological cultivation

Cultivating mushrooms is a natural way to recycle organic materials while also supporting plant and soil health. Mushrooms play a key role in soil acting as a natural carbon sink. Specifically, carbon is taken up by fungal root networks, which is then stored in soil or used as food to help mushrooms grow. In 2021, the Pennsylvania mushroom industry won a state-level grant to study how to better use spent mushroom compost, focusing on carbon sequestration gleaned from applying spent mushroom compost.

Recommendations:

• Support expanding federal grants, studies, and interest in mycological cultivation and usage as compost.

Support for Small, Rural, Beginning and Organic Farms

Government Procurement

The federal U.S. Government is the largest purchaser across the global, with over \$650 billion in annual purchasing power. Government procurement is a significant area where we can bolster support for local and climate-friendly farms and reduce our environmental footprint. There are a number of federal programs providing food for Americans. These programs can utilize local foods grown using sustainable practices and reducing transportation needs.

We commend the Administration's Federal Buy Clean Initiative and recognize the Farm Bill as an opportunity to grow support for local purchasing and increased sustainability.

Recommendations:

- Increase procurement of healthier, climate-based diets within the federal government. Several government programs currently exist to provide food to schools, communities, the military, veterans, and federal employees
- Identify ways to increase access to healthier, local options, as well as more climate-friendly options, such as alternative protein crops

Relevant Legislation:

• Kids Eat Local Act (H.R. 2896, Rep. Chellie Pingree)

Support for Organics and Specialty Crops

Organic farmers utilize practices to help preserve the environment, protect soil's organic composition, maintain and improve biodiversity, and reduce erosion. According to the USDA, in

2019 there were over 16,500 certified organic farms in the United States. These farms are often found to use less energy, have reduced carbon emissions, and improve soil health.

According to the USDA, in 2017 there were about 240,000 specialty crop farming operations growing more than 350 types of fruit, vegetable, tree nut, flower, nursery, and other horticultural crops. Specialty crops are not immune to climate-related challenges, and unlike annual field crops, they can't be abandoned in response to severe weather events, including drought, heat or storms. Further support for organic and specialty crops will strengthen climate resilience on farms.

Recommendations:

- Identify opportunities for increasing support for small- and medium-sized farmers to cultivate plant-based protein crops under USDA specialty crop programs, including, but not limited to, providing financial incentives for farmers to grow or transition crops to plant-based protein crops
- Increase the organic cost share certification
- Ensure that high-value specialty crops, including tree fruit and others, are able to participate in USDA conservation programs
- Eliminate separate, lower organic payment limit in EQIP

Support for Beginning, Young and Socially Disadvantaged Producers

Many beginning, young, and socially-disadvantaged farmers face a number of barriers to entry in farming. Many are acutely aware of how climate change impacts and changes their work. These farmers are poised to implement climate-smart practices, but we must equip them with the resources they need to succeed. Many of these farmers also lease their land, which can limit their ability to pursue climate-friendly practices in a long-term, sustainable way.

- Money for training and support: increased and permanent funding for the Beginning Farmer and Rancher Development Program and Socially Disadvantaged and Veteran Farmers and Ranchers Program
- Grant opportunities for beginning and socially disadvantaged farmers to access federal grants for conservation and local food systems
- A USDA liaison within each state to support beginning farmers and ranchers, and regional liaisons to help retiring farmers and ranchers with succession planning
- Establish a Land Tenure Commission to advise USDA on land access, farm business transition, and land tenure issues
- Income tax credits for those who sell land and productive business assets like
 used equipment or livestock to beginning, socially disadvantaged, or veteran
 farmers and ranchers, and a separate income tax credit for beginning, socially
 disadvantaged, and veteran farmers and ranchers who purchase this type of
 property

- Ensure that agricultural cooperatives can access Farm Service Facility Loan funding
- Direct USDA to study and make recommendations of how conservation practices can and should be conducted on leased land

- Justice for Black Farmers Act (H.R. 1393, Rep. Alma Adams)
- Veteran and Beginning Farmers Assistance Act (H.R. 6003, Rep. Annie Kuster)
- Conservation for Agricultural Leased Land Act (H.R. 2756, Rep. Julia Brownley)

Forestry and Wildfires

About one-third of the land area in the United States is forested. This land provides significant ecological and environmental services, including air and water resources; fish and wildlife habitats; opportunities for recreation and cultural use; and timber resources for lumber, plywood, paper, and other materials. America's forests and associated harvested wood products also sequester the equivalent of 14% of economy-wide carbon dioxide emissions annually. The Farm Bill contains a standalone forestry title that provides assistance to federal and non-federal forest management and restoration, support for the wood products industry, and forestry research.

Forest Management and Wildfire Prevention

In recent years, there has been a rapid escalation of extreme wildfire behavior. Every year, threats to communities and ecosystems increase: fire season starts earlier and ends later, home and property damage becomes more and more common, and the cost of fire suppression grows. The Forest Service alone has 90 million acres of land in need of treatment to mitigate fire risk, increase resilience to insect and disease infestation, and improve overall forest health. In order to sufficiently address the wildfire crisis, the federal government must undertake four times as many forest health treatments annually than it currently does.

The Bipartisan Infrastructure Law and Inflation Reduction Act will provide historic investments in forest management and wildfire mitigation over the next decade, but there are serious concerns about federal land management agencies' ability to translate that funding into results on the ground. The Farm Bill provides an opportunity to develop program and partnerships systems that will support sustainable, climate-smart forest management moving forward.

- Increase the pace and scale of landscape-scale restoration activities such as ecologically-appropriate thinning and prescribed fire
 - This should include supporting innovative solutions like conservation finance and public-private partnerships
- Support the development of a thriving wood products industry

• Build up staff capacity at federal land management agencies and encourage the development of a comprehensive forestry workforce

Relevant Legislation:

- Wildfire Emergency Act (H.R. 3534, Rep. Jimmy Panetta)
- National Prescribed Fire Act (H.R. 3442, Rep. Kim Schrier)
- Save Our Forests Act (H.R. 5341, Rep. Jimmy Panetta)
- Wildfire Response and Drought Resiliency Act (H.R. 5118, Rep. Joe Neguse)

Climate-Smart Forestry

Climate-Smart Forestry is an emerging forest management approach intended to augment forest carbon storage and build forest resilience to a changing climate in a manner that complements other ecosystem services including preventing soil erosion and protecting water resources. As climate change takes an increasing toll on forests across the country, our management strategies and practices must evolve to create more resilient landscapes capable of providing ecosystem benefits long into the future.

Recommendations:

- Leverage the investments in the Inflation Reduction Act to ensure the adoption of climate-smart forestry throughout the US
 - This should include ensuring carbon capture programs have strong monitoring, reporting, and verification (MRV) measures that are easy for forest owners and managers to adopt
- Find opportunities to support remote sensing technology applications in forestry, which support foresters in the carbon capture process

Developing Markets for Low-Grade Wood

Historically, it has been economically inefficient to remove low-grade wood such as small diameter trees out of the forest for use as wood products. However, as we increase the pace and scale of forest management and wildfire mitigation, hazardous fuels management activities will result in increased availability of this material. We need to increase funding for the research and development of market opportunities for low-grade wood to provide an economic incentive for healthy forest management.

Recommendations:

• Elevate the Wood Innovation Grants Program and the Community Wood Grants Program

Relevant Legislation:

• Community Wood Facilities Assistance Act (H.R. 5122, Rep. Chellie Pingree)